



**UNITED STATES DEPARTMENT OF COMMERCE**  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/167,314 10/06/98 ARMSTRONG

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BRAD A ARMSTRONG  
P O BOX 1419  
PARADISE CA 95967

LM02/0620

EXAMINER

NGUYEN, K

ART UNIT

PAPER NUMBER

2774

DATE MAILED:

06/20/99

*4*

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/167,314

Applicant(s)

ARMSTRONG, BRAD A.

Examiner

Kevin M. Nguyen

Art Unit

2774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (U.S. Patent No. 59,10,798) in view of Thornburg (U.S. Patent No. 4,313,113).
3. As to claims 1-4, Kim teaches an apparatus for moving a cursor on a screen (see figure 2, column 2, lines 1-14). Kim teaches all of the claimed limitation with the exception of the claimed "at least two of said sensors each capable of providing at least three readable states of varied conductance; at least two states of said at least three readable states dependant upon depressive pressure applied to the variable-conductance sensors through depression of an associated button". However, Thornburg teaches the cursor control devices is connected in a electrical circuit which supplies signals to move the cursor on the CRT display in a selected direction at a slow speed when the high resistance condition is present and at a higher speed in the selected direction as the resistance condition is lowered (column 2, lines 32-37). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the cursor keys 18a, 18b, 18c and 18d as taught by Thornburg for the movement button 103b, 103c, 103d and 103e as taught by Kim because the prior art control keys as taught by Kim increment cursor movement in one of the four indicated directions at a single rate, a decidedly burdensome task (Thornburg, column 1, lines 62-64). Thornburg teaches four conductive coordinate electrodes 52

(figure 8, column 4, lines 54-55). The pressure transducer has been shown in phantom as a variable resistance element (column 3, lines 53-55). As the result, the cursor will be moved more rapidly and directly to the desired location (column 2, lines 16-17).

4. As to claim 5 and 6, Thornburg teaches two keys 18D' and 18C' which contact the elastomeric electrode 42 (see figure 7, column 4, lines 24-29). Key 18D' correspond to dome-cap, electrode 42 corresponds to the sensor as claims.

5. As to claim 7, Thornburg teaches a package housing (figure 8) which includes a wobble plate 62 with an conductive stud 64, four electrodes 52, a circuit board 48, and four connecting leads 54 (see figure 8, 9 and 10, column 4, lines 52-61). Accordingly, a wobble plate 62 corresponds to a disk as claims.

6. Claims 8-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim and Thornburg as applied to claims 1-7 above, and further in view of Bertram et al (U.S. Patent No. 6,049,812).

7. Kim and Thornburg teaches all of the claimed limitation with exception of the claimed Back signal type and Forward signal type. However, Bertram teaches a network browser software which includes the content window 11 is useful for navigation purposes with an active menu of Back and Forward (see figure 4 and 5, column 7, lines 17-35). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the mouse 103 taught by Kim and Thornburg for the mouse 20 taught by Bertram because the extra button Back and Forward in a window Netscape browser or a mouse still provide the same control function.

### *Conclusion*

Application/Control Number: 09/167,314  
Art Unit: 2774

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No.	5,883,619	Ho et al.
U.S. Patent No.	5,457,478	Frank
U.S. Patent No.	6,020,884	MacNaughton et al.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 703-305-6209. The examiner can normally be reached on Monday through Friday 8 am-5pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 703-305-4709. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-9051 for regular communications and 703-308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Kevin M. Nguyen  
June 16, 2000



RICHARD A. HJERPE  
SUPERVISORY PATENT EXAMINER  
GROUP 2700